

IN THE CLAIMS

1. (Currently amended) A method for automatically updating a source node in a PNNI ATM network, comprising:

- a) receiving, at a destination node in said PNNI ATM network, a notification of an address change of said destination node, wherein said node is within a PNNI ATM network, and wherein said destination node comprises a destination endpoint for a[[n]] soft permanent virtual circuit (SPVC) that connects said source node with said destination nodeflows within said PNNI ATM network to said node; and
- b) encoding said address change into a SIG field in a PNNI topology state element (PTSE); and
- c) issuing said PTSE from said destination node to said source node to automatically update said source node with said address changeissuing from said node information describing said address change within a SIG field in a PNNI Topology State Element (PTSE).

2. (Previously Presented) The method of claim 1 wherein said PTSE is embedded within a PNNI Topology State Packet (PTSP).

3. (Currently amended) The method of claim 1 wherein said PTSE is issued as part of a scheduled broadcast of status information of said destination node.

4. (Previously Presented) The method of claim 1 wherein said PTSE is issued in response to said notification, said notification regarded as an event within said PNNI ATM network worthy of reporting to other nodes within said PNNI ATM network.

5. (Previously Presented) The method of claim 1 further comprising issuing said PTSE from said PNNI ATM network, said PNNI ATM network being a peer network within a larger PNNI ATM network.

6. (Previously Presented) The method of claim 1 wherein said PTSE has a limited lifetime within said PNNI ATM network.

7. (Original) The method of claim 1 wherein said notification is directed from a network management control station.

8. (Currently Amended) The method of claim 1 wherein said information describing said address change further comprises a new address for said destination node and an old address of said destination node.

9. (Currently Amended) The method of claim 1 wherein said address change is within an NSAP format.

10. (Currently Amended) A method for automatically updating a source node in a PNNI ATM network, comprising:

a) receiving at said source node within said PNNI ATM network, information describing an address change of a[[n]] destination~~ether~~ node within said PNNI ATM network, wherein said destination~~ether~~ node comprises a destination endpoint for a[[n]] soft permanent virtual circuit (SPVC) that connects said source node with said destination node~~flows within said PNNI ATM network to said other node~~, said address change information comprising an old address for said destination node~~ether~~ node and a new address for said destination~~ether~~ node, wherein said address change information is encoded~~contained~~ within a SIG field in a PNNI topology state element (PTSE);

b) comparing said old address for said destination~~ether~~ node with an SPVC destination node address maintained by said source node to establish an SPVC connection supported by said source node; and

c) replacing said SPVC destination node address with said new address if said old address and said SPVC destination node address match.

11. (Previously Presented) The method of claim 10 wherein said PTSE is embedded within a PTSP.

12. (Currently Amended) The method of claim 10 wherein said PTSE is issued as part of a scheduled broadcast of status information of said destination~~ether~~ node.

13. (Currently Amended) The method of claim 10 wherein said PTSE is issued in response to said destination~~ether~~ node being notified of said address change, said notification regarded as an event within said PNNI ATM network worthy of reporting to said node.

14. (Previously Presented) The method of claim 10 further comprising issuing said PTSE from said PNNI ATM network, said PNNI ATM network being a peer network within a larger PNNI ATM network.

15. (Previously Presented) The method of claim 10 wherein said PTSE has a limited lifetime within said PNNI ATM network.

16. (Currently Amended) The method of claim 10 wherein said address change is within an NSAP format.

17. (Currently Amended) A machine readable medium having stored thereon sequences of instructions which, when executed by a digital processing system, cause said system to perform a method for automatically updating a source node in a PNNI ATM network, comprising:

in response to a notification of an address change to a destination node in said PNNI ATM network, encoding said address change into a SIG field in a PNNI topology state element (PTSE);

issuing said PTSE from said destination node to said source node over a soft permanent virtual circuit (SPVC) connecting said destination node with said source node; and

updating said source node with said address change information issuing from a node information describing an address change to said node within a SIG field in a PTSE, whererin said node is within a PNNI ATM network, and wherein said node comprises a destination endpoint for an SPVC that flows within said PNNI ATM network to said node.

18. (Previously Presented) The machine readable medium of claim 17 wherein said PTSE is embedded within a PTSP.

19. (Currently Amended) The machine readable medium of claim 17 wherein said PTSE is issued as part of a scheduled broadcast of status information of said destination node.

20. (Currently Amended) The machine readable medium of claim 17 wherein said PTSE is issued in response to a notification of said address change, said notification is regarded as an event within said PNNI ATM network worthy of reporting to other nodes within said PNNI ATM network.

21. (Previously Presented) The machine readable medium of claim 17 where said method further comprises issuing said PTSE from said PNNI ATM network, said PNNI ATM network being a peer network within a larger PNNI ATM network.

22. (Previously Presented) The machine readable medium of claim 17 wherein said PTSE has a limited lifetime within said PNNI ATM network.

23. (Previously Presented) The method of claim 17 wherein said information describing said address change further comprises a new address for said node and an old address of said node.

24. (Currently Amended) The method of claim 23 wherein said address change is within an NSAP format.

25. (Currently Amended) A machine readable medium having stored thereon sequences of instructions which, when executed by a digital processing system, cause said system to perform a method for automatically updating a source node in a PNNI ATM network, comprising:

a) receiving, at said source node within said PNNI ATM network, a PTSE having SIG-information describing an address change of a destination node within said PNNI ATM network, wherein said destination node comprises a destination endpoint for a soft permanent virtual circuit (SPVC) that connects said source node to said destination node, said address change information comprising that includes an old address for said destination node an SPVC endpoint within said network and a new address for said destination node, wherein said address change information is encoded within a SIG field in a PNNI topology state element (PTSE)SPVC endpoint within said network;

b) comparing said old address with an SPVC destination node address maintained by said source node to establish an SPVC connection supported by said source node; and

c) replacing said SPVC destination node address with said new address if said old address and said SPVC destination node address match.

26. (Previously Presented) The machine readable medium of claim 25 wherein said PTSE is embedded within a PTSP packet.

27. (Previously Presented) The machine readable medium of claim 25 wherein said method further comprises issuing said PTSE from said PNNI ATM network, said PNNI ATM network being a peer network within a larger PNNI ATM network.

28. (Currently Amended) The machine readable medium of claim 25 wherein said address change is within an NSAP format.